

CLAIMS

1. Process for production of an aluminium foil (10) coated with a sealable and sterilisable plastic (14) based on polypropylene (PP) or polyethylene (PE), characterised in that the plastic (14) is coextruded with an adhesion-promotion agent (16) and combined with an aluminium foil (24) between two rollers (20, 22), the aluminium foil (10) coextrusion-coated in this way, to increase the adhesion strength between the aluminium foil (24) and the plastic coating (14), then passes continuously through an oven (26) with temperature ( $T_O$ ) set so that the temperature at the surface of the plastic coating (14) and the adhesion-promotion agent (16) lies above the crystallite melt point ( $T_K$ ) of the plastic, and the coated aluminium foil (10) heat-treated in this way, after emerging from the oven (26), is cooled in a shock-like manner such that the crystalline proportion at least in the surface area of the cooled plastic coating (14) and the crystal grains in this area are as small as possible.
2. Process according to claim 1, characterised in that the temperature ( $T_O$ ) of the oven (26) lies at least 20°C above the crystallite melt point ( $T_K$ ) of the plastic (14).
3. Process according claim 1 or 2, characterised in that the start temperature ( $T_S$ ) for the shock-like cooling of the plastic layer (14) lies above the crystallite melt point ( $T_K$ ) of the plastic (14) and the end temperature ( $T_E$ ) of the shock-like cooling lies at least 40°C below the crystallite melt point ( $T_K$ ).
4. Process according to claim 3, characterised in that the end temperature ( $T_E$ ) of the shock-like cooling is at

least 60°C, preferably at least 80°C below the crystallite melt point ( $T_0$ ) of the plastic (14).

5. Process according to any of claims 1 to 4, characterised in that the shock-like cooling speed ( $V_A$ ) of the plastic layer (14) is greater than 10°C/sec.
6. Process according to claim 5, characterised in that the shock-like cooling speed ( $V_A$ ) is greater than 50°C/sec, preferably greater than 100°C/sec.
7. Process according to any of claims 1 to 6, characterised in that the shock-like cooling of the plastic layer (14) is carried out by partial looping over at least one cooled roller (20, 22).
8. Process according to any of claims 1 to 6, characterised in that the shock-like cooling of the plastic layer (14) is carried out by direct cooling by means of a liquid or gaseous coolant (30).
9. Process according to claim 8, characterised in that the coated aluminium foil (10) is passed through water, where applicable ice-cooled.
10. Process according to claim 8, characterised in that the coated aluminium foil (10) is sprayed with liquid coolant (30), preferably water.
11. Process according to claim 8, characterised in that the coated aluminium foil (10) is cooled by means of a gas, preferably a cooled gas.
12. Process according to any of claims 1 to 11, characterised in that as an adhesion-promotion agent (16), co- or terpolymers modified to promote adhesion with ethylene (E) or propylene (P) as one of the monomer components are used, in particular E.AA, E.MAA,

E.VA, E.MA, E.EA, E.nBA, E.CO, E.VA.CO, E.nBA.CO, E.AE.AA or P.MAH, where Aa is acrylic acid, AE acryl ester, (MA, EA, BA), nBA n-butyl acrylate, CO carbon monoxide, EA ethyl acrylate, MA methyl acrylate, MAA methacrylic acid, MAH maleic anhydride and VA vinyl acetate.

13. Use of the process according to any of claims 1 to 12 or use of a coated aluminium foil (10) produced with the process according to any of claims 1 to 12, for production of a package (40) for moist animal feed (42).
14. Packaging made from an aluminium foil (24) coated with plastic (14) and produced with the process according to any of claims 1 to 12.
15. Packaging according to claim 14 in the form of a semi-rigid container (44) formed from the coated aluminium foil (10), in particular a can or dish.
16. Packaging according to claim 14 in the form of a peelable lid (52) made from the coated aluminium foil (10).
17. Packaging according to claim 15, characterised in that the container (14) has a peelable lid (52) of the coated aluminium foil (10) sealed to its edge area (50).
18. Use of the packaging according to any of claims 14 to 17 for moist animal feed.